

Decision **PROPOSED DECISION OF ALJ O'DONNELL** (Mailed 7/15/2003)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Joint Application of Southern California Edison Company and San Diego Gas and Electric Company for the 2002 Nuclear Decommissioning Cost Triennial Proceeding to Set Contribution Levels for the Companies' Nuclear Decommissioning Trust Funds and Address Other Related Decommissioning Issues.

Application 02-03-039  
(Filed March 21, 2002,  
amended June 17, 2002)

Carol Schmid-Frazee, Attorney at Law, for Southern California Edison Company, and Steven C. Nelson, Attorney at Law, for San Diego Gas and Electric Company, applicants.  
Gregory Heiden, Attorney at Law, for the Office of Ratepayer Advocates, James Adams, for the Surfrider Foundation, Bob Finkelstein, Attorney at Law, and Bill Marcus for The Utility Reform Network, interested parties.

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## **O P I N I O N**

### **I. Summary**

The purpose of this nuclear decommissioning cost triennial proceeding (NDCTP) is to set the annual revenue requirements for the decommissioning trusts for nuclear power plants owned by Southern California Edison Company (SCE) and San Diego Gas and Electric Company (SDG&E) (collectively, the utilities).

SCE requests continuation of its current annual revenue requirement of \$25.0 million for San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2&3), and Palo Verde Nuclear Generating Station Units 1, 2, and 3 (Palo Verde).

SDG&E requests an annual revenue requirement of \$11.534 million for SONGS 2&3.

By this decision, we set the annual revenue requirement for SCE at \$32.848 million for 2003. This results in a \$7.848 million increase from its currently authorized revenue requirement. For SDG&E we set the annual revenue requirement at \$6.692 million for 2003. This results in a \$1.692 million increase over its currently authorized annual revenue requirement. The reasons for the differences between the requested and adopted numbers are different adopted rates of return for the trusts, cost escalation rates, contingency factors, and low level radioactive waste (LLRW) burial costs.

In addition to the above revenue requirements, we find the San Onofre Nuclear Generating Station Unit 1 (SONGS 1) decommissioning work completed as of December 31, 2001 (\$91 million) reasonable, find the utilities' estimate of SONGS 1 remaining decommissioning work (\$531 million) reasonable, and authorize the utilities to use the tax benefits retained in the non-qualified trust fund for SONGS 1 to fund decommissioning work on that plant.<sup>1</sup>

## **II. Background**

SCE owns 80% of SONGS 1, and 75.05% of SONGS 2&3. SDG&E owns 20% of SONGS 1, 2 & 3.<sup>2</sup> SCE is a non-operating owner of 15.8% of Palo Verde. Arizona Public Service Company (APS) owns 29.10% of Palo Verde, and is the operating agent.<sup>3</sup>

Application (A.) 02-03-020 is the application of Pacific Gas and Electric Company (PG&E) for its 2002 NDCTP. Combined hearings were held for both the instant application and A.03-03-020, although the proceedings were not consolidated. The purpose of the combined hearings was to address issues

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<sup>1</sup> The utilities estimate that the SONGS 1 trusts will be sufficient to meet estimated future decommissioning costs if the tax benefits are retained in the non-qualified trusts. There are two types of trusts. Qualified trusts hold decommissioning funds that result from contributions that qualify for an income tax deduction under U.S. Internal Revenue Code Section 468A. Nonqualified trusts hold decommissioning funds that result from other contributions.

<sup>2</sup> The cities of Anaheim and Riverside own the remaining 3.16% and 1.79% interests in SONGS 2&3, respectively.

<sup>3</sup> The remaining non-operating owners are: Salt River Project (17.49%), El Paso Electric Company (15.80%), Public Service Company of New Mexico (10.20%), The Southern California Public Power Authority (5.91%), and Los Angeles Department of Water and Power (5.70%).

common to both proceedings in a single set of hearings. In that way, a record was developed that allows the Commission to treat common issues consistently. Therefore, the testimony and exhibits of PG&E, SCE, SDG&E, and the Commission's Office of Ratepayer Advocates (ORA) regarding common issues are included in the record for both applications. The testimony and exhibits regarding utility specific issues are included only in the application to which they pertain.

PG&E is not a party to this application. However, it participated in the development of the record. The Surfrider Foundation, and The Utility Reform Network are parties to this proceeding. However, they did not provide testimony or exhibits, cross-examine witnesses, or file briefs. Therefore, the term "parties," as used in this decision, refers to the active parties, SCE, SDG&E and ORA. In addition, the term "participants" refers to PG&E, SCE, SDG&E, and ORA.

Trust fund contribution levels and the resulting revenue requirements are calculated using complex computer models. The models are first used to estimate the decommissioning costs in current dollars. The decommissioning costs are then escalated to the future years in which they will occur. The models then use the current trust fund balances, and estimated future earnings, to estimate the trust fund contributions necessary to pay the decommissioning costs when they occur. The models then determine the revenue requirement needed to provide the contributions. The disputed issues in this proceeding concern model inputs and assumptions as addressed below.

### **III. Overview**

#### **A. SCE**

SCE recommends continuation of the current \$25 million annual revenue requirement in order to ensure that decommissioning funds are available when needed, maintain rate stability; and ensure that customers receiving the benefits of SONGS 2&3 and Palo Verde operation are equitably burdened with the costs to decommission those facilities. As to SONGS 1, SCE believes no further contributions to the trust funds are needed.

#### **B. SDG&E**

SDG&E requests an \$11.534 million annual revenue requirement for 2003.<sup>4</sup> As to SONGS 1, SDG&E also believes no further contributions to the trust funds are needed.

### **IV. Utility-Specific Issues**

#### **A. SDG&E 2&3 Decommissioning Cost Estimate**

The utilities estimate decommissioning costs for SONGS 2&3 at \$2.23 billion. ORA proposes a reduction of \$15 million in reactor vessel and internals segmentation and removal costs, and a reduction of \$77 million related to spent fuel wet storage costs. ORA also opposes the utilities' escalation rates

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<sup>4</sup> In its original testimony filed jointly with SCE on March 21, 2002, SDG&E proposed to bifurcate the issue of future contribution levels for SDG&E's customers from this proceeding, and move it to its 2004 cost of service proceeding. SDG&E's initial proposal, had it been adopted, necessarily would have involved litigating issues, such as rates of return, in SDG&E's 2004 cost of service proceeding. SDG&E amended the application on June 17, 2002 to address the issue of future contribution levels in this proceeding, rather than in its 2004 cost of service proceeding.

and rates of return. These issues are addressed later in this decision under common issues.

The utilities' estimate of the decommissioning costs for SONGS 2&3 is based on a site-specific review of the decommissioning requirements for SONGS 2&3, and takes into account experience in decommissioning SONGS 1.

The utilities' SONGS 2&3 decommissioning cost estimate includes increased costs associated with a four-year schedule increase. The schedule increase resulted in additional fixed project costs of \$96 million. These fixed project costs are associated with the base project staff.

ORA recommends that the Commission reject the utilities' \$150 million reactor vessel internals segmentation, reactor vessel segmentation, and large component removal activities estimate for SONGS 2&3, and instead use a \$135 million estimate. ORA contends that the very high costs for these activities for SONGS 1 were partially caused by the newness of the segmentation and removal processes. ORA also argues that there will be technological developments that will simplify these processes. Therefore, ORA recommends a 10% (\$15 million) reduction from the utilities' estimate to account for future improvements in decommissioning methods.

Regarding spent fuel wet storage and additional LLRW volume disposal costs, the utilities' estimate includes \$96 million for fixed project costs for a four-year schedule extension. ORA contends that the fixed costs that the utilities propose are 102% of direct costs for LLRW, in contrast to the 35% fixed cost share the utilities used for their overall project estimate. ORA maintains that the four-year schedule extension does not mean that the scope of general decommissioning work should expand proportionately by four more years at an additional cost of \$96 million. ORA contends that the decommissioning work

should be spread out according to the new 15-year schedule, and the staffing costs should also be spread out over that period. ORA recognizes that there are still fixed costs that need to be added for four years of additional wet fuel storage, including the corporate overhead and base project staff. Therefore, ORA proposes reducing the utilities' \$96 million estimate, by \$77 million, to \$19 million. The \$19 million includes 20% for overhead, plus needed staff.

### **Discussion**

ORA recommends a 10% reduction in costs for reactor vessel internals segmentation, reactor vessel segmentation, and large component removal activities to account for future improvements in decommissioning methods. While there may be such improvements in the future, what they may be, and the effect on costs is unknown. ORA offers no specific reasons why such improvements, if they occur, will result in a 10% savings. Therefore, we will not adopt ORA's recommendation.

As to the proposed staffing changes, ORA proposes reducing the fixed cost estimate because it believes that the schedule increase results in doing the same amount of work over a longer period of time. However, that is not the case. The additional costs are for additional work that will be performed. Therefore, we will not adopt its recommendation.

### **B. Palo Verde Decommissioning Costs**

SCE estimates its share of decommissioning costs for Palo Verde at \$503 million. ORA proposes a \$27 million reduction in staffing costs associated with schedule changes, and a \$3.5 million reduction in large scale component removal costs. ORA also opposes SCE's contingency factor, escalation rates, and rates of return. These issues are addressed later in this decision under common issues.



SCE's estimate is based on a study performed for APS by TLG Services, Inc. (TLG). When assumptions in the TLG study were inconsistent with SCE's understanding of industry decommissioning experience, or its experience decommissioning SONGS 1, SCE applied adjustments. SCE says its decommissioning cost estimate for Palo Verde is not as detailed or definitive as the updated SONGS 2&3 cost estimate.

Changes to site staffing expenses account for \$27 million of the increased staffing costs for dismantling activities. The increase is for engineering, cost and scheduling, emergency preparedness, and security work functions as well as support functions such as health and safety, legal, and regulatory affairs. SCE believes these staffing increases are consistent with increases currently planned for other decommissioning projects in the United States reviewed by TLG.

The SONGS 2&3 and Palo Verde reactor vessels, reactor vessel internals, and large components are of similar design and size. Therefore, SCE used the same estimation methods for internals segmentation, vessel segmentation, and large component removal activities at both SONGS 2&3 and Palo Verde.

ORA recommends the Commission disallow \$27 million in increased labor costs included in SCE's estimate because SCE provided no specific justification, such as the previously unanticipated tasks these additional personnel will perform. As with the SONGS 2&3 estimates, ORA recommends that SCE's estimates for internals segmentation, vessel segmentation, and large component removal activities for Palo Verde be reduced by 10% (\$3.55 million) to account for future improvements in decommissioning methods.

### **Discussion**

SCE's estimate of increased staffing levels is based on the staffing levels associated with other decommissioning projects in the United States. No decommissioning plan has yet been developed for Palo Verde. Therefore, we would not expect the level of detail that ORA would have us require at this time. As a result, we will not adopt ORA's recommendation.

ORA recommends a 10% (\$3.55 million) reduction in costs for internals segmentation, vessel segmentation, and large component removal activities to account for future improvements in decommissioning methods. While there may be such improvements in the future, what they will be, and the effect on costs is unknown. ORA offers no specific reasons why such improvements will result in a 10% savings. Therefore, we will not adopt its recommendation.

## **V. SONGS 1 Decommissioning**

### **A. \$91 Million Incurred Costs for Decommissioning**

In D.99-06-007, the Commission approved a settlement establishing a presumption that the utilities' conduct is reasonable in performing SONGS 1 decommissioning work if the scope of the work completed, and costs incurred, are bounded by the most recently approved SONGS 1 decommissioning cost estimate. This presumption means that any entity claiming the utilities acted unreasonably would bear the burden of proving their claim.

The utilities say the \$91 million of SONGS 1 decommissioning work completed as of December 31, 2001, is reasonable because it is less than the estimated \$96 million cost for the work that was approved in D.99-06-007. ORA does not oppose the reasonableness of the expenditures. Pursuant to D.99-06-007, we find that the SONGS 1 \$91 million decommissioning work completed as of December 31, 2001 is reasonable.

**B. SONGS 1 Decommissioning Work  
Remaining as of December 31, 2001**

The utilities represent that the SONGS 1 remaining decommissioning work cost estimate (\$531 million) is based on site-specific detailed planning studies. More than 60% of the remaining SONGS 1 decommissioning work scope is subject to fixed price contracts. As a result, the utilities reduced the contingency for remaining SONGS 1 decommissioning work to 15%, in recognition of the reduced cost uncertainty associated with remaining decommissioning work scope. Therefore, the utilities request that the Commission find their estimate for remaining work at SONGS 1 reasonable, and authorize them to access up to 90% of this estimate from the trusts to pay for the work.

ORA does not oppose the utilities' estimate of the work remaining, or their proposal to use trust funds to pay for it.

The utilities developed their estimate through detailed planning studies, executed contracts that have either fixed the cost or minimized the cost uncertainties for approximately 60% of the remaining work, and reduced the contingency factor to 15%. In addition, ORA does not oppose it. Therefore, we will adopt it.

In D.99-06-007, we authorized the utilities to access trust funds to pay for decommissioning work up to 90% of the approved estimate. The utilities' request to do so is unopposed. Since granting the request will avoid finance charges due to delays in trust fund withdrawals to pay for decommissioning work, we see no reason not to grant it.

**C. Use of The Tax Benefit Created When Non-Qualified Trust Funds are Expended**

There are two types of trusts. Qualified trusts hold decommissioning funds that result from contributions that qualify for an income tax deduction under U.S. Internal Revenue Code Section 468A. Nonqualified trusts hold decommissioning funds that result from other contributions. The utilities request authority to use tax benefits retained in the SONGS 1 non-qualified trust fund to continue decommissioning work, if necessary.

The utilities forecast that the \$482 million (2001 dollars) available in the SCE SONGS 1 decommissioning trust and the \$166 million (2001 dollars) available in the SDG&E SONGS 1 decommissioning trust will be sufficient to meet the estimated future cost requirement. However, the available funds include non-qualified trust fund tax benefit values of \$132 million (SCE) and \$42 million (SDG&E) as of December 31, 2001. Pursuant to the settlement approved in D.99-06-007, the utilities retained the tax benefits associated with deducting decommissioning costs that were reimbursed from the non-qualified decommissioning trust, rather than immediately returning these tax benefits to ratepayers when these decommissioning costs were incurred. The utilities believe they may need to utilize these tax benefits in order to assure sufficient funding for the remaining SONGS 1 decommissioning work. Therefore, they request authorization to use these tax benefits to pay for the remaining decommissioning work, and avoid any need to seek further ratepayer funding. ORA does not oppose the request.

By granting the request, we ensure that there will be sufficient funds to pay for decommissioning without imposing an additional revenue requirement on ratepayers to pay for decommissioning. If we were to require the tax benefits to be immediately returned to ratepayers, we would have to impose a revenue

requirement on them to provide additional funds to the trusts to pay for decommissioning. There would also be additional costs to implement the return of the benefits to the ratepayers. In addition, since SONGS 1 is not operational, imposing a revenue requirement on future ratepayers would violate one of the purposes of the trusts, which is to have the ratepayers who receive power from the plant pay for its decommissioning. Therefore, we see no reason to discontinue the practice we previously adopted.

## **VI. Common Issues**

### **A. Rate of Return**

For estimating the earnings of the nuclear decommissioning trusts, SCE estimates a pre-tax return on equities that is in the range of 7.42% to 10.11%, and a pre-tax return on fixed income assets that is in the range of 4.21% to 6.03%. SDG&E estimates a pre-tax return on equities of 7.42%, and a pre-tax return on fixed income assets of 6.03%. PG&E estimates an 11.0% pre-tax return on equities, and a 7.0% pre-tax return on its fixed income assets. ORA recommends a 12.5 % pre-tax return on equities, and a 7.4 % pre-tax return on fixed income assets.

SCE used two sets of return assumptions to establish a range of contributions to its decommissioning trust funds for SONGS 2&3 and Palo Verde. The first set of assumptions relies on DRI-WEFA (DRI)<sup>5</sup> projections for: (1) the Standard & Poor's (S&P) 500 Stock Price Index, and (2) the dividend yield for the S&P 500 Stock Index to calculate a projection of future equity returns. SCE maintains that when compared to estimates derived from historical data, DRI's Treasury bond yield projections are too high relative to their inflation projection, and DRI's estimate of future equity returns is too low. Therefore, it constructed an alternative set of return assumptions that adjust Treasury bond yield projections and future equity returns to reflect historical relationships. SCE argues that its two sets of return assumptions bound expected returns for the decommissioning trust funds.

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<sup>5</sup> DRI is a company that provides economic forecasts.

SDG&E says that it does not make sense to adopt identical rate of return assumptions for itself, SCE and PG&E because each company has its own separate and independent decommissioning trusts with portfolios of hundreds of different domestic and international stocks. Moreover, each company has different investment committees with different risk tolerances. As a result of these differences, the utilities may choose different portfolio asset allocations, investment strategies, and investment advisors, all of which will impact the realized investment rates of return.

SDG&E used DRI projections as the basis for computing expected equity and fixed-income asset returns in this filing. It maintains that DRI forecasts should be consistently used in determining SDG&E's funding requirements during this proceeding and others. SDG&E also argues that using DRI forecasts consistently over time provides the Commission with a consistent gauge to assess performance, and provides fewer opportunities for gaming that could occur if methodologies are changed every three years. Specifically, DRI projects that the average annual pre-tax return for the S&P 500 and 10-year Treasury bond will average 7.42% and 6.03% respectively from 2002 through 2026, which covers the period that contributions will be made to the decommissioning trusts.<sup>6</sup> SDG&E says the DRI forecast is also consistent with equity projections from a variety of investment professionals.

PG&E's equity return forecast is based on the annualized rate of return for the U.S. equity market for rolling ten-year periods covering 80 years, from

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<sup>6</sup> SDG&E expects to collect decommissioning contributions only through 2013 (through the end of operations), although it will continue to invest in equities for another 5 or 10-year period until commencement of decommissioning.

1920 through 2001. The forecasted return on fixed income assets is also based on long-term rates of return. PG&E believes that forecasts of long-term market returns are traditionally based on historic market experience over very long time periods, and it is preferable to include more data points where available to decrease the variance in the results. In PG&E's last general rate case (D.00-02-046), the Commission adopted an 11.0% pre-tax return on equities. PG&E believes an 11.0% pre-tax return on equities remains a reasonable and conservative forecast. In D.00-02-046, the Commission also adopted a 7.0% pre-tax return on the fixed income portion of PG&E's trusts. PG&E recommends the same value in this proceeding.

ORA recommends a 12.5% pre-tax return on equities, and a 7.4% pre-tax return for fixed income investments. ORA's 12.5% pre-tax return on equities is derived from the 48-year (1954-2001) average annual return for the S&P 500 of 12.77%. ORA believes that evaluating historic performance beginning in 1954, after the Federal Reserve removed its cap on government debt rates, creates a more reliable historic record than using data beginning before the Great Depression as PG&E has done. Furthermore, using 1954 as a starting date allows analysis of 10-year Treasury bond data.

ORA contends that the Commission should not adopt PG&E's rate of return assumptions because the historic results have been much higher. ORA points out that PG&E's estimates are lower than readily available investment options such as tax-free municipal bonds. ORA believes its 7.4% pre-tax return for fixed income investments is comparable to the DRI forecast, current municipal bond rates, and actual performance of the trust funds.

While ORA does not oppose SCE's methods, it does oppose SDG&E's methods. SDG&E relied exclusively on DRI long-term forecasts. In contrast,



SCE's rate of return estimate uses both DRI and its own estimates to forecast its decommissioning fund performance. ORA says SCE's approach is preferable because it incorporates consideration of the historical premium for equity risk that it believes has virtually disappeared in the DRI projections.

ORA says that SDG&E did not back-test the DRI projections for accuracy, and that DRI's short-term equity performance forecast from the 1998 NDCTP did not forecast the current state of the equities market. ORA believes that using the DRI projections alone, without any adjustments for historical risk premium, is not a valid methodology.

### **Discussion**

As pointed out by SDG&E, each utility has its own separate and independent decommissioning trust portfolios. In addition, each utility has different investment committees with different risk tolerances. As a result of these differences, SCE, SDG&E, and PG&E's realized investment rates of return will be different. However, in this proceeding, none of the participants has indicated specifically how these factors are incorporated into its estimates. In addition, the three utilities' trusts will have access to the same markets. As a result, their trusts will have the same investment opportunities. Therefore, we will adopt a uniform set of rate of return projections for all three utilities.

For equity returns, there is merit in using long-term historical data as used by PG&E and ORA. However, their presentations demonstrate that selection of which data to use can give quite different results. In contrast to the historical data, the DRI forecasts, which SDG&E and SCE use in different ways, yield much lower returns. No participant has demonstrated that its estimate is substantially better than the rest. The midpoint of the range of values recommended by the participants is below the 11.0% pre tax return on equities

we adopted for PG&E in D.00-02-046.<sup>7</sup> This leads us to believe that some reduction is appropriate. Therefore, we will adopt a 10.5% pre-tax return on equities, which is slightly above the midpoint of the range of values estimated by the participants.

Regarding fixed assets, no participant has demonstrated that its estimate is substantially better than the rest. Since the midpoint of the range of values recommended by the participants is below the 7.0% pre tax return on fixed assets we adopted for PG&E in D.00-02-046, some reduction is appropriate. Therefore, we will adopt a 6.0% pre-tax return on fixed assets, which is slightly above the midpoint of the range of values estimated by the participants.

#### **B. Escalation Rate**

The escalation rate is used to bring the current estimate of decommissioning costs to the future years in which the costs will be incurred.

The utilities calculated separate escalation rates for: (1) labor, (2) the combined category of material, equipment, and other, and (3) low level radioactive waste (LLRW) burial costs. They based the separate escalation rates for labor, and the combined category of material, equipment, and other upon DRI projections. The escalation rate for the combined category of material, equipment, and other was based on a weighted average of the escalation rates for each component.

The utilities used Nuclear Regulatory Commission (NRC) published data to estimate an escalation rate for LLRW burial costs. The NRC data shows

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<sup>7</sup> The current trust fund contribution levels for SCE and SDG&E were adopted in D.99-06-007. That decision approved a settlement and, therefore, is not a precedent.

rapidly increasing burial costs followed by large, discrete jumps. The utilities utilized two similar statistical models to produce ten estimates ranging from 6.8% to 19.9%. They then chose a 10% LLRW burial cost escalation rate because of the possibility of additional large jumps in LLRW burial costs.

The utilities did not include a separate contingency factor in their calculation of escalation rates.

PG&E calculated the simple average of the escalation rates for labor, LLRW disposal costs, contract labor, materials, and other costs to arrive at an annual escalation rate. It then added a 20% contingency factor to arrive at its recommended overall escalation rate.

PG&E's escalation rates, except for LLRW burial costs, are based on DRI forecasts. The DRI forecasts do not extend beyond 2023. Therefore, PG&E used a DRI forecast to calculate escalation rates until 2023, and used the 2023 rate for subsequent years. It represents that its labor, materials, contract labor and other escalation rates are comparable to the most recent DRI forecasts.

PG&E believes that using a weighted average simply adds false precision to a highly speculative estimate. PG&E says that its methodology is the same as was used to calculate the overall escalation rate used by PG&E, and adopted by the Commission in D.00-02-046.

PG&E added a 20% contingency factor to come up with its overall escalation rate.<sup>8</sup> PG&E states that the contingency factor ensures against future ratepayer liabilities by recognizing uncertainties with regard to changes in the

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<sup>8</sup> In D.00-02-046, the Commission adopted a 25% contingency factor.

economy, and protects against uncertainties in how much decommissioning costs may increase in the future.

PG&E recommends a 7.5% escalation rate for LLRW burial costs for use in this proceeding as it was in D.00-02-046. PG&E says it is uncertain where the LLRW will be buried, and how much it is going to cost. PG&E believes that since the uncertainty is even greater now, with the Ward Valley disposal site stalled, and other sites about to stop taking California LLRW, a 7.5% escalation rate is a conservative and reasonable assumption.

ORA argues that an unweighted average escalation rate makes no statistical sense, and overestimates actual escalation. ORA maintains that PG&E's unweighted calculation gives a 20% weighting to each of the five categories. However, the equipment and materials category accounts for 29%, and the "other" category accounts for 6% of actual expenditures, rather than the 20% used by PG&E for these two categories. ORA contends that this proves the inaccuracy of using an unweighted average. As a result, ORA recommends that a weighted average, based on expenditures, be used.

ORA also says that PG&E's use of the 2023 value for years after 2023, when using DRI forecasts in calculating an average escalation rate, gives undue weight to the 2023 value. It points out that, while the escalation rates in the earlier years have some relation to historic costs, the years after 2023 are not based on any independent forecast.

ORA contends that PG&E relied on a DRI forecast from 2001 in generating the labor escalation rate, and that a more recent DRI forecast yields significantly lower numbers. Therefore, ORA recommends that the Commission adopt the most recent DRI data.

ORA also says that PG&E's request for an additional 20% contingency factor is redundant since an overall contingency factor is already built into its decommissioning cost estimate.

ORA recommends a 5% escalation rate for LLRW burial costs. This is because LLRW burial costs increased only 2.4% from 1996 to the present, and only 4.3% from 2000 to 2001. ORA says that PG&E's only rationale for using a 7.5% LLRW burial cost escalation rate is that the Commission has previously adopted it.

ORA also opposes the utilities' proposed 10% LLRW burial cost escalation rate. It says the utilities relied entirely on NRC disposal cost indexes from 1986 to 2000, but did not attempt to independently verify the data. It believes that a reasonable cost escalation projection should consider additional factors to help explain a data set, and should look beyond the numbers to determine causes for their variation, as well as possible future developments. ORA says the utilities performed no such evaluation, and did not inquire as to why certain years were missing from the NRC data, or why the costs jumped significantly in certain years.

ORA maintains that the utilities' choice of data is not representative of future costs. ORA says the data used by the utilities, from three disposal sites for the period 1986-2000, reflects non-competitive disposal pricing. It also says that more recent data under more competitive conditions for Barnwell in South Carolina, and Envirocare in Utah, including contracted SONGS 1 LLRW burial costs, were not considered in the utilities' estimate. ORA believes the utilities have projected the most expensive possible future scenario without consideration of the prospect of a more competitive market for burial of LLRW.

### **Discussion**

While we agree with PG&E that we are dealing with a highly speculative estimate, that is no reason to deliberately introduce an error into the calculation. ORA has demonstrated that the actual expenditures do not support the equal weighting that results from a simple average. In addition, the utilities used a weighted average. Therefore, except for LLRW burial costs, we will require the use of a weighted average.

The participants agree that a DRI forecast should be used to forecast escalation rates, except for LLRW burial costs. The disagreement appears to be over which forecast to use. Here again, although forecasts of the future are speculative by nature, it makes sense to use the most recent available forecasts. Therefore, we will use the DRI forecasts used by ORA, which are the most recent DRI forecasts in the record.

We note that the DRI forecasts run only through 2023. When determining an average escalation rate for a forecast period, PG&E uses the 2023 rate for subsequent unforecasted years. However, as pointed out by ORA, this approach gives additional weight to the last forecasted year. There is no reason that the forecast for 2023 is any better than the forecast for other years. Therefore, the average rate for the forecast period shall be used for the subsequent unforecasted years. This means that the rate for 2024, and each year thereafter, would be the average of the rates for 2002-2023.

We adopt contingency factors for cost estimates when the work to be done may change substantially over time due to such things as changing NRC requirements. This is the case with the decommissioning cost estimate. However, the escalation rate is an estimate of the rate of change in the cost of specified work. The Commission routinely adopts forecasts of cost increases, in general rate cases for example, without applying contingency factors. Since the

risk of substantial changes in the work to be done and the requirements that must be met to do the work is covered by the contingency factor applied to the decommissioning cost estimate, there is no reason to apply a separate contingency factor to the calculation of the escalation rate. We also note that the utilities are not requesting one. Therefore, we will not adopt a separate contingency factor for escalation rates.

Regarding the LLRW burial cost escalation rate, the utilities estimate a 10% rate based on economic modeling of NRC data, PG&E proposes a 7.5% escalation rate based on our previous adoption of it, and ORA proposes a 5% escalation rate based on burial cost increases from 1996 to the present. Since the NRC data shows significant jumps and has no data for some years, we believe that it demonstrates the uncertainty of the costs, but does not provide a good basis for estimation. Therefore, we will not adopt the utilities' 10% escalation rate. Likewise, ORA has not demonstrated that the recorded burial costs increases from 1996 to the present provide a better basis for estimation than the NRC data. Therefore, we will not adopt ORA's 5% escalation rate. As pointed out by PG&E, it is uncertain where the wastes will be buried, and at what cost. Burial costs are no less certain now than they were when the Commission adopted a 7.5% escalation rate for PG&E in D.00-02-046. Therefore, since no participant has demonstrated that its estimate is more accurate than the other estimates, it is reasonable to continue using the previously approved rate. This rate also happens to be the midpoint of the rates recommended by the participants.

### **C. LLRW Burial Costs**

LLRW burial costs are the costs of burying the LLRW generated by the decommissioning of a nuclear power plant. The utilities' LLRW burial cost

estimate is \$72.60 per cubic foot for SONGS 2&3. This estimate is based on the assumed availability of a licensed disposal facility with rates comparable to the Envirocare facility, and located within 1,500 miles of the SONGS site.

SCE's LLRW burial cost estimate for Palo Verde is \$87 per cubic foot. SCE says its estimate is consistent with APS's assumptions about the burial sites that APS will use for Palo Verde LLRW.

PG&E estimates LLRW burial costs of \$404 per cubic foot.<sup>9</sup> PG&E points out that, in D.00-02-046, the Commission adopted LLRW burial costs at the Ward Valley site of \$509 per cubic foot in 1997 dollars. Because there is no indication that Ward Valley will ever be available during the times it will be needed, PG&E based its estimate on the costs of the only facility in America to which it can send more-contaminated LLRW, at Barnwell, South Carolina. Even though Barnwell is going to stop accepting wastes from non-Atlantic Compact generators such as PG&E, SCE, and SDG&E, PG&E believes Barnwell's costs are appropriate because they include all of the costs a future disposal facility (such as Ward Valley is intended to be) would likely bill a generator. Given the complete uncertainty over where these wastes will eventually go, and how much it will

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<sup>9</sup> In PG&E's application and exhibits, it used LLRW burial costs of \$404 per cubic foot for Diablo Canyon Power Plant Units 1 and 2 (Diablo Canyon). For its Humboldt Bay Power Plant Unit 3 (Humboldt) 2015 decommissioning, it used \$450 per cubic foot. For Humboldt early decommissioning, it used \$140 per cubic foot for Class A LLRW and \$450 per cubic foot for the more hazardous classes of LLRW. This yields an average cost of \$147 per cubic foot for early decommissioning. In its briefs, PG&E presented its recommendation as \$404 per cubic foot without distinguishing between Diablo Canyon and Humboldt. Therefore, we address only PG&E's \$404 per cubic foot recommendation herein.



cost once that place is identified and operational, PG&E believes its \$404 per cubic foot estimate is optimistic.

ORA recommends that the Commission adopt the utilities' LLRW burial cost estimate of \$72.60 per cubic foot. ORA claims that PG&E derives its \$404 estimate from recent cost increases at Barnwell and other facilities. ORA believes that PG&E's methodology is faulty because it ignores the likely availability of alternative facilities. ORA argues that the utilities' \$72.60 per cubic foot estimate reflects their current burial cost for all classes of LLRW. ORA does not oppose the utilities' estimated LLRW burial costs for Palo Verde.

### **Discussion**

In D.00-02-046, we adopted burial costs of \$509 per cubic foot (in 1997 dollars). In this proceeding, the participants have recommended costs ranging from \$76.20 to \$404 per cubic foot. Therefore, it appears that the participants agree that the costs should be lower. However, they disagree on how much lower they should be.

Only PG&E and SCE actually prepared LLRW burial cost estimates. SDG&E and ORA recommend use of SCE's estimate. In addition, we have no reason to believe that there will be sufficient alternative burial sites available to lower costs due to competition, as recommended by ORA. Therefore, we are left with PG&E and SCE's estimates.

Although both PG&E and SCE's estimates are based on actual costs, neither estimate has been demonstrated to be substantially better than the other. This circumstance argues for using a cost of \$240 per cubic foot, the midpoint of the range of the proposed values. However, since SCE has done a more comprehensive analysis of decommissioning costs, especially for SONGS 2&3, we will give slightly more weight to its estimates. As a result, we will adopt a

LLRW burial cost of \$200 per cubic foot. This amount is a bit more than twice SCE's estimates, slightly less than half of PG&E's \$404 estimate, and substantially less than the cost adopted in D.00-02-046.

#### **D. Contingency Factor – SONGS 2&3**

The contingency factor is used to increase the estimated decommissioning costs to allow for uncertainties in the required decommissioning work and, therefore, the costs. The utilities retained ABZ Inc. (ABZ) to assist SCE in preparing the site-specific decommissioning cost study for SONGS 2&3. SCE provided ABZ with information about decommissioning costs, based on its experience decommissioning SONGS 1, for use in estimating the decommissioning costs. In addition, SCE was able to estimate for ABZ many SONGS 2&3 decommissioning costs that were previously undefined, and assumed to be included within the 40% contingency included in the previous estimate. As a result, SCE reduced the contingency factor for SONGS 2&3 from 40% to 21%.

ORA does not oppose the use of a 21% contingency factor for SONGS 2&3. ORA agrees that the 21% contingency factor is appropriate because the utilities were able to apply their experience decommissioning SONGS 1 to their SONGS 2&3 estimate, thereby reducing the uncertainty.

We concur, SCE has utilized its decommissioning experience with SONGS 1 to refine its estimate for SONGS 2&3. These refinements lead to a substantial reduction in the contingency factor. As a result, we will adopt the utilities' proposed contingency factor for SONGS 2&3.

#### **E. Contingency Factor - Palo Verde**

APS retained TLG to prepare a site-specific decommissioning cost study for Palo Verde. SCE used TLG's study as a resource to develop its

estimate. SCE made adjustments to correct large discrepancies that it believes a 40% contingency factor will not cover. However, SCE believes the adjustments did not refine the Palo Verde estimate sufficiently to reduce the contingency factor. SCE notes that Palo Verde has not entered into a detailed planning phase for imminent shutdown and decommissioning. Therefore, working level studies that would occur in a detailed planning phase for imminent shutdown and decommissioning, thereby decreasing the level of uncertainty for estimated decommissioning costs, have not yet been performed. As a result, SCE proposes a 40% contingency factor.

ORA recommends a 30% contingency factor for Palo Verde. ORA believes that SCE's experiences with SONGS 1 decommissioning, as well as its review of decommissioning at other facilities, should allow it to reduce the contingency factor for Palo Verde. ORA argues that, since SCE has used its experience and knowledge of decommissioning to increase its cost estimates for Palo Verde by approximately \$101 million, it should use that same experience and knowledge to reduce its contingency factor for Palo Verde.

ORA realizes that the planning for Palo Verde decommissioning is at an earlier stage than the planning for SONGS 2&3. Therefore, ORA recommends a 30% contingency factor, the midpoint between the 21% SCE proposes for SONGS 2&3, and the 40% SCE proposes for Palo Verde. Additionally, ORA believes that since SCE has updated its cost estimate by 25% because of reduced cost uncertainty, a 25% reduction in the contingency factor, from 40% to 30%, is appropriate.

### **Discussion**

SCE has utilized its decommissioning experience and knowledge to refine its estimate for Palo Verde as it has for SONGS 2&3. These refinements

should lead to some reduction in uncertainty, and therefore, some reduction in the contingency factor. However, we are not convinced that there is necessarily a direct relationship between an increase in the decommissioning cost estimate, and a reduction in the contingency factor, as proposed by ORA. We note that SONGS 2&3 are estimated to begin decommissioning in 2022. The Palo Verde units are estimated to begin decommissioning in 2024-2027, only a few years later. This too suggests a lower contingency factor. However, we are also aware that Palo Verde is operated by APS rather than SCE, and that no detailed planning, similar to that which has been done for SONGS 2&3, has been done for decommissioning Palo Verde. Therefore, the 21% contingency factor adopted for SONGS 2&3 would be inappropriate for Palo Verde.

Neither party has demonstrated that its recommendation is substantially better than the other's recommendation. At the same time, their arguments convince us that a reasonable contingency factor lies between 30% and 40%. Since there is no reason to give more weight to either parties' estimate, we will adopt a 35% contingency factor.

## **VII. Conclusion**

As discussed above, we have adopted the following modifications to SCE and SDG&E's calculations of the decommissioning cost revenue requirements:

- A 10.5% pre-tax return on equities.
- A 6.0% pre-tax return on fixed assets.
- Escalation rates, except for LLRW burial costs, based on the most recent DRI forecasts in the record, using weighted averages, and no separate contingency factor.
- A 7.5% escalation rate for LLRW burial costs.
- LLRW burial costs of \$200 per cubic foot.

- A contingency factor of 35% for Palo Verde.

Based on the above modifications to the decommissioning cost calculations, we adopt an annual revenue requirement for SONGS 2&3 for SCE of \$21.160 million, respectively. We also adopt an annual revenue requirement for Palo Verde \$11.688 million. This results in an overall annual revenue requirement for SCE of \$32.848 million.

Based on the above modifications to the decommissioning cost calculations, we adopt an annual revenue requirement for SONGS 2&3 for SDG&E of \$6.692 million.

In addition to the above revenue requirements, we find the SONGS 1 decommissioning work completed as of December 31, 2001 (\$91 million) reasonable, find the utilities' estimate of SONGS 1 remaining decommissioning work (\$531 million) reasonable, and authorize the utilities to use the tax benefits retained in the non-qualified trust fund for SONGS 1 to fund decommissioning work on that plant.

This decision should be effective immediately, so that the revenue requirements adopted herein can be put into effect as soon as possible.

### **VIII. Rate Proposal**

SCE does not propose a rate change in this proceeding. SDG&E requests a rate increase, and proposes to implement it on an equal cents per kilowatt-hour basis, consistent with D.00-06-034. D.00-06-034 requires that decommissioning costs be allocated on an equal cents per kilowatt-hour basis. Therefore, we will require the utilities to implement the revenue requirements adopted herein on an equal cents per kilowatt-hour basis.

## **IX. Procedural Matters**

In Resolution ALJ 176-3085, dated April 4, 2002, the Commission preliminarily categorized this application as ratesetting, and preliminarily determined that hearings were necessary. Hearings were held on September 16 and 17, 2002.

## **X. Comments on the Draft Decision**

The proposed decision of ALJ O'Donnell was mailed to the parties in accordance with Pub. Util. Code § 311(d) and Rule 77.1 of the Commission's Rules of Practice and Procedure. Comments were filed by SCE, SDG&E and ORA. All comments were considered. SCE raises one matter that should be addressed.

SCE and SDG&E will need to request a revised Schedule of Ruling Amounts from the federal Internal Revenue Service (IRS) in order to implement this decision. To facilitate obtaining a favorable ruling from the IRS, SCE, and SDG&E ask that tables showing the revenue requirement, assumptions, and fund disbursements adopted herein be included in this decision. The request is reasonable, and we will grant it. The tables for SCE and SDG&E are included as Attachments A and B, respectively.

## **XI. Assignment of Proceeding**

Geoffrey F. Brown is the Assigned Commissioner, and Administrative Law Judge (ALJ) Jeffrey P. O'Donnell is the principal hearing officer in this proceeding.

## **Findings of Fact**

1. SCE owns 80% SONGS 1, and 75.05% of SONGS 2&3.
2. SDG&E owns 20% of SONGS 1, 2 & 3.
3. SCE is a non-operating owner of 15.8% of Palo Verde.

4. APS owns 29.10% of Palo Verde, and is the operating agent.
5. The utilities' estimate for the decommissioning costs of SONGS 2&3 is based on a site-specific review of the decommissioning requirements for SONGS 2&3, and takes into account experience in decommissioning SONGS 1.
6. While there may be improvements in internals segmentation, vessel segmentation, and large component removal activities in the future, what they may be, and the effect on costs is unknown.
7. ORA offers no specific reasons why improvements in internals segmentation, vessel segmentation, and large component removal activities, if they occur, will result in a 10% savings at SONGS 2&3.
8. The utilities' proposed staffing changes for spent fuel wet storage and additional LLRW volume disposal costs are for additional work that will be performed.
9. SCE's decommissioning cost estimate for Palo Verde is not as detailed or definitive as the updated SONGS 2&3 cost estimate.
10. The SONGS 2&3 and Palo Verde reactor vessels, reactor vessel internals, and large components are of similar design and size.
11. No decommissioning plan has yet been developed for Palo Verde.
12. ORA offers no specific reasons why improvements in decommissioning methods for internals segmentation, vessel segmentation, and large component removal activities will result in a 10% savings in the future at Palo Verde.
13. In D.99-06-007, the Commission approved a settlement establishing a presumption that the utilities' conduct is reasonable in performing SONGS 1 decommissioning work if the scope of the work completed and costs incurred are bounded by the most recently approved SONGS 1 decommissioning cost estimate.

14. SCE completed the SONGS 1 decommissioning work, as of December 31, 2001, for \$91 million, which is less than the \$96 million estimate approved in D.99-06-007.

15. No party contested the reasonableness of the \$91 million in expenditures.

16. The utilities' \$531 million estimate of SONGS 1 remaining decommissioning work, based on site-specific detailed planning studies, is unopposed.

17. The utilities' request to access up to 90% of the \$531 million estimate from the trusts to pay for the decommissioning work is unopposed.

18. In D.99-06-007, the Commission authorized the utilities to access trust funds to pay for decommissioning work up to 90% of the approved estimate.

19. Granting the utilities' request to access up to 90% of the approved estimate from the trusts to pay for the decommissioning work will avoid finance charges due to delays in trust fund withdrawals to pay for decommissioning work.

20. More than 60% of the remaining SONGS 1 decommissioning work scope is subject to fixed price contracts.

21. The utilities reduced the contingency factor for remaining SONGS 1 decommissioning work to 15%.

22. The utilities have \$482 million available in the SCE SONGS 1 decommissioning trust, and \$166 million available in the SDG&E SONGS 1 decommissioning trust.

23. The SONGS 1 trust funds include non-qualified trust fund tax benefit values of \$132 million (SCE) and \$42 million (SDG&E) as of December 31, 2001.

24. Pursuant to the settlement approved in D.99-06-007, the utilities retained the tax benefits associated with deducting decommissioning costs that were



reimbursed from the SONGS 1 non-qualified decommissioning trust, rather than immediately returning these tax benefits to ratepayers.

25. The utilities' request to use tax benefits retained in the non-qualified trust fund to continue SONGS 1 decommissioning work is unopposed.

26. If the Commission were to require the tax benefits to be immediately returned to ratepayers, it would have to impose a revenue requirement on them to provide additional funds to the trusts to pay for decommissioning.

27. There would also be additional costs to implement the return of the tax benefits to the ratepayers.

28. Since SONGS 1 is not operational, imposing a revenue requirement on future ratepayers would violate one of the purposes of the trusts, which is to have the ratepayers who receive power from the plant pay for its decommissioning.

29. In D.00-02-046, the Commission adopted an 11% pre-tax return on equities, and a 7% pre-tax return on the fixed income portion of PG&E's trusts.

30. No participant has indicated specifically how differences in decommissioning trust portfolios, and investment committee risk tolerances are incorporated into its rate of return estimates.

31. The three utilities' trusts will have access to the same securities markets, with the same investment opportunities.

32. While there is merit in using long term historical data for estimating rates of return, selection of which data to use can give quite different results.

33. The DRI forecasts, which SDG&E and SCE use in different ways, yield much lower returns than the historical data used by PG&E and ORA.

34. No participant has demonstrated that its estimate of pre-tax returns on equities is better than the other participant's estimates.

35. Since the midpoint of the pre-tax returns on equities recommended by the participants is lower than the 11% pre-tax return on equities adopted in D.00-02-046, a reduction in the pre-tax return on equities is appropriate.

36. A 10.5% pre-tax return on equities is slightly above the midpoint of the range of values estimated by the participants.

37. The current trust fund contribution levels for SCE and SDG&E were adopted in D.99-06-007.

38. No participant has demonstrated that its estimate of pre-tax returns on fixed assets is better than the other participant's estimates.

39. Since the midpoint of the pre-tax returns on fixed assets recommended by the participants is lower than the 7% pre-tax return on fixed assets adopted in D.00-02-046, a reduction in the pre-tax return on fixed assets is appropriate.

40. A 6.0% pre-tax return on fixed assets is slightly above the midpoint of the range of values estimated by the participants.

41. The NRC data shows rapidly increasing LLRW burial costs followed by large, discrete jumps.

42. The utilities did not include a separate contingency factor in their calculation of escalation rates.

43. A 7.5% escalation rate for LLRW burial costs was adopted for PG&E by the Commission in D.00-02-046.

44. PG&E's use of a simple average in calculating escalation rates gives a 20% weighting to all five categories, while the equipment and materials category accounts for 29%, and the "other" category accounts for 6% of actual expenditures.

45. The participants agree that a DRI forecast should be used for escalation rates, except for LLRW burial cost escalation.

46. ORA's DRI forecasts are the most recent in the record.

47. When using DRI forecasts to estimate escalation rates, use of the value for the last forecasted year for subsequent unforecasted years gives additional weight to the last forecasted year.

48. There is no reason that the DRI forecast for the last forecasted year is any better than the forecast for other years.

49. The Commission adopts contingency factors for cost estimates when the work to be done, and the requirements that must be met to do the work, may change substantially over time.

50. The escalation rate is an estimate of the rate of change in the cost of specified work.

51. The Commission routinely adopts forecasts of cost increases, in general rate cases for example, without applying contingency factors.

52. The NRC LLRW burial cost data shows significant jumps, and has no data for some years.

53. ORA has not demonstrated that its recorded LLRW burial cost increases from 1996 to the present provide a better basis for estimation than the NRC data used by the utilities.

54. It is uncertain where the LLRW will be buried, and at what cost.

55. LLRW burial costs are no less certain now than they were when the Commission adopted a 7.5% LLRW burial cost escalation rate for PG&E in D.00-02-046.

56. The midpoint of the range of LLRW burial cost escalation rates recommended by the participants is 7.5%.

57. The utilities acknowledge that LLRW burial costs could increase substantially due to imposition of state fees or taxes upon LLRW imported from other states such as California.

58. The midpoint of the range of estimated LLRW burial costs proposed by the parties is \$240 per cubic foot.

59. The utilities have done a more comprehensive analysis of decommissioning costs, especially for SONGS 2&3, than PG&E.

60. The utilities' proposed 21% contingency factor for SONGS 2&3 is unopposed.

61. Palo Verde has not entered into a detailed planning phase for imminent shutdown and decommissioning.

62. SCE's use of its decommissioning experience and knowledge to refine its estimate for Palo Verde, as it has for SONGS 2&3, should lead to some reduction in uncertainty and, therefore, some reduction in the contingency factor below the 40% proposed by SCE.

63. There is not necessarily a direct relationship between an increase in the decommissioning cost estimate, and a reduction in the contingency factor.

64. The fact that SONGS 2&3 are estimated to begin decommissioning in 2022, and Palo Verde is estimated to begin decommissioning in 2024-2027, suggests the use of a contingency factor for Palo Verde of less than 40%.

65. Use of the 21% contingency factor used for SONGS 2&3 would be inappropriate for Palo Verde.

### **Conclusions of Law**

1. Pursuant to D.99-06-007, the SONGS 1 \$91 million decommissioning work completed as of December 31, 2001 is reasonable.

2. The Commission should adopt the utilities' \$531 million estimate for SONGS 1 remaining decommissioning work, and authorize them to access up to 90% of the estimate from the trusts to pay for the decommissioning work.

3. Since the utilities' request for authority to use tax benefits retained in the non-qualified trust fund to continue SONGS 1 decommissioning work was approved by D. 99-06-007, and is unopposed, it should be approved.

4. SCE, SDG&E, and PG&E's realized rates of return for their trusts will be different.

5. The Commission should adopt a uniform set of rate of return projections for all three utilities.

6. D.99-06-007 approved a settlement and, therefore, is not a precedent.

7. The Commission should adopt a 10.5% pre-tax return on equities.

8. The Commission should adopt 6.0% pre-tax return on fixed assets.

9. Although forecasts of escalation rates are speculative by nature, it makes sense to use the most recent available forecasts.

10. The Commission should adopt the DRI forecasts used by ORA, which are the most recent DRI forecasts in the record, for use in determining escalation rates.

11. When using DRI forecasts for estimating escalation rates, the average rate for the forecast period should be used for the subsequent unforecasted years.

12. The Commission should not adopt a separate contingency factor for escalation rates.

13. The NRC LLRW burial cost data does not provide a good basis for estimating LLRW burial cost escalation rates.

14. The Commission should adopt a 7.5% escalation rate for LLRW burial costs.

15. Future LLRW burial costs are uncertain at best.
16. PG&E's estimate of LLRW burial costs is no better than the estimates prepared by the utilities.
17. Actual LLRW burial costs will lie within the range of estimates proposed by the participants.
18. The Commission should adopt LLRW burial costs of \$200 per cubic foot.
19. The Commission should adopt the utilities' proposed 21% contingency factor for SONGS 2&3.
20. The Commission should adopt a 35% contingency factor for Palo Verde.
21. SCE should be authorized a revenue requirement of \$32.848 million.
22. SDG&E should be authorized a revenue requirement of \$6.692 million.
23. This decision should be effective immediately so that the revenue requirements adopted herein can be put into effect as soon as possible.
24. D.00-06-034 requires that decommissioning costs be allocated on an equal cents per kilowatt-hour basis.
25. The revenue requirements adopted herein should be implemented on an equal cents per kilowatt-hour basis.

**O R D E R**

**IT IS ORDERED** that:

1. The following annual revenue requirements are adopted for Southern California Edison Company (SCE) for 2003-2005; \$21.160 million for decommissioning of San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2&3), and \$11.688 million for decommissioning of Palo Verde Nuclear Generating Station Units 1, 2, and 3.
2. The revenue requirement adopted for San Diego Gas and Electric Company (SDG&E) for 2003-2005 is \$6.692 million for decommissioning of SONGS 2&3.
3. No revenue requirement is authorized for San Onofre Nuclear Generating Station Unit 1.
4. The revenue requirements adopted herein shall be put into rates on an equal cents per kilowatt-hour basis as required by Decision (D.) 00-06-034.
5. SCE and SDG&E shall file advice letters implementing the revenue requirements adopted herein no later than 30 days after the effective date of this decision.
6. Pursuant to D.99-06-007, the SONGS 1 \$91 million decommissioning work completed as of December 31, 2001 is reasonable.
7. The utilities' \$531 million estimate for SONGS 1 remaining decommissioning work is adopted.
8. The utilities are authorized to access up to 90% of the \$531 million estimate from the trusts to pay for SONGS 1 remaining decommissioning work.

9. SCE and SDG&E's request for authority to use tax benefits retained in the non-qualified trust funds to continue SONGS 1 decommissioning work is approved.

10. This proceeding is closed.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.



**ATTACHMENT A**  
**SCHEDULE OF RULING AMOUNTS TABLES**  
**SOUTHERN CALIFORNIA EDISON COMPANY**

**ATTACHMENT B**  
**SCHEDULE OF RULING AMOUNTS TABLES**  
**SAN DIEGO GAS & ELECTRIC COMPANY**

[O'Donnell Attachment A in Decommissioning Triennial Cost Review](#)